

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES

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In re Application of: : Examiner:  
: Anthony J. Green  
Rita BITZER et al. :  
:  
:  
For: CORROSION PROTECTIVE LACQUER : Art Unit 1793  
FOR BRAKING SURFACES OF BRAKE :  
DISKS AND/OR BRAKE DRUMS, : Conf. No. 9401  
CORROSION PROTECTIVE COATING :  
PRODUCED THEREFROM, AND A :  
METHOD FOR REMOVING THE :  
CORROSION PROTECTIVE COATING :  
:  
Filed: November 25, 2003 :  
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Serial No.: 10/723,934 :  
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**REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41**

SIR:

Appellants submit the present Reply Brief in response to the Examiner's Answer  
dated May 14, 2008.

## **REMARKS**

Claims 2 to 10, 12 to 17, 27 and 31 stand finally rejected as allegedly failing to comply with the enablement requirement under 35 U.S.C. § 112, first paragraph. Claims 2 to 10, 12 to 17, 27 and 31 stand finally rejected as allegedly indefinite under 35 U.S.C. § 112, second paragraph. Claims 2 to 4, 10, 12 to 14, 17, 27, and 31 stand finally rejected under 35 U.S.C. § 102(b) as anticipated by German Published Patent Application No. 43 14 432 ("DE '432"). Claims 2 to 7, 12 to 17, 27, and 31 stand finally rejected under 35 U.S.C. § 102(b) as anticipated by European Published Patent Application No. 0 976 795 ("EP '795"). For at least the reasons set forth below and in the Appeal Brief of March 24, 2008, the rejection of claims 2 to 10, 12 to 17, 27, and 31 should be reversed.

### **I. Rejection of Claims 2 to 10, 12 to 17, 27, and 31 Under 35 U.S.C. § 112, First Paragraph**

The Answer reflects an apparent misapprehension of the enablement requirement. As stated in the Appeal Brief, the standard for determining whether the enablement requirement is satisfied was settled nearly a century ago by the Supreme Court in Mineral Separation v. Hyde, 242 U.S. 261, 270 (1916), to wit: is the experimentation needed to practice the claimed subject matter undue or unreasonable. Thus, it is now well-settled that "[t]he test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation." U.S. v. Teletronics, Inc., 857 F.2d 778, 785, 8 U.S.P.Q.2d 1217, 1223 (Fed. Cir. 1988). As such, the test of enablement is not whether any experimentation is necessary but rather whether any experimentation that may be necessary is undue. In re Angstadt, 537 F.2d 498, 504, 190 U.S.P.Q. 214, 219 (C.C.P.A. 1976).

The Answer states on page 9 that "even a highly skilled artisan would not immediately be expected to recognize what is meant by the broad recitation 'has an average grain size that is substantially equal to at least one of a maximum roughness, average pore diameter, and an average size of score marks of the braking surface of the at least one of the brake disk and the brake drum.'" However, the enablement standard does not revolve around what is immediately recognizable to one of ordinary skill in the art at the time of the invention. The test is whether

one skilled in the art at the time of filing could make or use the invention without undue experimentation.

The Answer further obfuscates matters by stressing that one skilled in the art would in effect be overwhelmed attempting to practice the claimed subject matter in every possible scenario, i.e., on every possible type of vehicle and piece of machinery that includes a brake disc or drum using every possible available coating. However, the issue is not the amount of work it would take one skilled in the art to determine the maximum roughness and average grain size of score marks on every brake disc and drum braking surface. The issue is whether one skilled in the art would have had to unduly experiment to practice the claimed subject matter.

There is no indication or assertion in any Office Action to date or in the Examiner's Answer that determination of the maximum roughness and average grain size of score marks on a particular brake disc or drum braking surface requires undue experimentation. There is also no indication or assertion in any Office Action to date or in the Examiner's Answer that lining a brake surface a protective substance requires undue experimentation. The protective substance must be configured to at least one of chemically react with oxygen and bind with oxygen. There is no indication or assertion in any Office Action to date or in the Examiner's Answer that producing a protective substance that reacts with oxygen and applying it to the brake surface would require undue experimentation.

The protective substance has an average grain size that is substantially equal to at least one of a maximum roughness and an average grain size of score marks of the braking surface. Appellants respectfully submit that one skilled in the art would not have to unduly experiment to choose such a protective substance as one skilled in the art would not have to unduly experiment to determine the maximum roughness, average pore diameter, and average grain size of score marks on the surface of the chosen brakes disc or brake drum. As stated on page 5 of the Appeal Brief, such information can be determined by imaging the surface of the brake throughout its life through usage conditions and then circumscribing and calculating the areas of the pores and scores using computer programs. The Answer does not contend that such inspection of a particular brake surface and calculating the maximum roughness, average pore diameter, and

average grain size of score marks on the brake surface would require undue experimentation.<sup>1</sup> Once the maximum roughness, average pore diameter, and average grain size are determined one skilled in the art would also not have to unduly experiment to choose a particular substance with a matching grain size as the average grain size of the protective substance is readily identifiable by one skilled in the art. Again, the Answer does not contend otherwise.

Therefore, in light of all the foregoing, one skilled in the art at the time of filing would not have had to unduly experiment to produce a corrosion protective brake lacquer as recited in claim 10.

**II. Rejection of Claims 2 to 10, 12 to 17, 27 and 31 Under 35 U.S.C. § 112, Second Paragraph**

The Answer alleges that the phrase "substantially equal to at least one of a maximum roughness, an average pore diameter and an average size of score marks" in claim 10 is indefinite because the claim is not clear as to the type of brake encompassed. Claim 10 relates to a corrosion protective brake lacquer for producing a corrosion protection coating composition for a braking surface of at least one of a brake disk and a brake drum. Claim 10, therefore, clearly relates to a brake disk or brake drum, and there is no basis for the contention that the foregoing phrase is in any manner unclear. The position taken in the Examiner's Answer appears to relate to breadth not clarity.

Regarding Ex parte Slob, 157 U.S.P.Q. 172 (Bd. Pat. App. & Inter. 1967), Appellants maintain that the Examiner's reliance on this case is completely misplaced. The presently claimed brake lacquer is not characterized simply by properties, as alleged in the Answer. Claim 10 recites a protective brake lacquer. One skilled in the art would have an understanding as to the composition of this protective brake lacquer. Therefore, the composition of the lacquer need not be specifically recited in the claims.

**III. Rejection Under 35 U.S.C. § 102(b) Based on DE '432 and EP '795**

As stated in the Appeal Brief, DE '432 and EP '795 do not disclose, or even suggest, a protective substance having an average grain size that is substantially equal to at least one of a maximum roughness and an average size of score marks of a braking surface of at least one of a

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<sup>1</sup> The Answer states that the average grain size would depend on the level of brake usage. However, imaging the surface of the brake throughout its life though usage conditions clearly takes into account the level of brake usage.

brake disk and a brake drum, as required by claim 10, a protective substance having an average grain size substantially equal to at least one of a maximum roughness, an average pore diameter and an average size of score marks of the braking surface of the at least one of the brake disk and the brake drum, as required by claim 17, and a protective substance configured to fill one of a pore and a score of average size on the braking surface of the at least one of the brake disk and the brake drum upon abrading the corrosion protective coating composition by a brake lining during braking, as required by claim 31. Neither DE '432 (as gleaned from the Abstract) nor EP '795 links the grain size of the protective coating to its effectiveness in providing corrosion protection for the braking surface. This assertion seems to be based entirely -- and improperly -- on the present application. See, e.g., the Specification at p. 2, line 20 to p. 3, line 13.

The Answer alleges that the compositions disclosed in DE '432 and EP '795 would necessarily have to possess a grain size that encompasses that which is instantly claimed in order to adequately provide corrosion protection for the braking surface absent evidence to the contrary. This reasoning is faulty for at least the following reasons.

As an initial matter, the Examiner does not explain why he assumes that the coatings of DE '432 and EP '795 necessarily adequately provide corrosion protection. Just because the coatings are used for the same purpose does not mean that they necessarily achieve the same or even comparable results.

Further, even if the compositions of DE '432 and EP '795 provide for adequate corrosion protection, this does not necessarily mean that they achieve this protection through the use of the recited grain size. The present application does not state that the use of the recited grain size is the only way to achieve effective corrosion protection. Other qualities or features of the coating, including its reactivity with oxygen, may affect corrosion protection independent of the grain size. As stated in the Appeal Brief, "[o]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). The Final Office Action and Answer completely fail in this regard.

### CONCLUSION

For the foregoing reasons and for the reasons more fully set forth in the Appeal Brief, it is respectfully submitted that the final rejections of the pending claims should be reversed.

Respectfully submitted,

Dated: July 14, 2008

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